

**SPONTANEOUS COMMUNICATION NETWORKS****ABSTRACT OF THE DISCLOSURE**

5           A spontaneous data communication network includes antenna/transceiver  
sets located in mobile (e.g., vehicles such as cars, buses, trucks, ferries, etc.) or  
stationary units (e.g., computers, manufacturing equipment, office furniture, office  
equipment, road signs, overpasses, bridges, etc.). Each antenna/transceiver set  
directs network traffic based on optimizing a merit function or penalty function to  
10   reduce costs of congestion for stochastically changing demands and flows in a  
data communication system. The routers exchange values with neighboring  
routers. Based on the exchanged values and values local to a router, flow  
conditions are checked and if necessary the local values are adjusted until the flow  
conditions are satisfied or a time period expires. Adjustments are associated with  
15   optimizing a merit function or penalty function. Based on the adjusted values, the  
router adjusts parameters to be used to direct packets of the network traffic flows  
to other routers or other destinations within the data communication system. An  
aggregation scheme is used for reducing the number of values stored in a single  
router module.  
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